

## **ABSTRACT**

An x-ray detector panel support is disclosed that is formed with radiation absorbing material to reduce the reflection of x-rays off anything behind the scintillator, which may include the geometry of the panel support, the electronics, and the back cover of the x-ray detector. The absorbing material may take the form of a discrete layer secured to or otherwise disposed within the panel support. The radiation absorbing material may also be mixed with the base materials used to fabricate the panel support. As such, when the panel support is formed, it includes radiation absorbing components. The radiation absorbing material may include lead, barium sulfate, tungsten, as well as other materials. The panel support is constructed to inhibit the detection of backscattered x-rays without significantly increasing the size or weigh of the x-ray detector. The panel support is applicable with stationary or fixed as well as portable x-ray detectors.